

Video at Internet Archive

An overview on uploading,
archiving, and accessing videos

Open Video Conference
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archive.org

Internet Archive Overview

- nonprofit
- opensource
- accredited digital library
- focuses on digital preservation of books, videos, audio, the web, more
- 250,000+ videos with many benefits compared to other video upload services

"Universal access to human knowledge"

Mission to allow free uploading,
storage, and serving for all

- 250K+ videos
- 1.5 million books
- 400K music / concerts
- 150 billion web pages

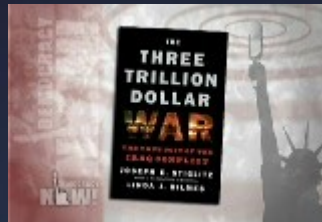
*Like a paper library, we provide free access to
researchers, historians, scholars, and the general
public.*

Video hosting differences

- Transcode videos to other formats
- Store forever with no advertisements
- Lifetime management of videos -- as new formats become popular we create them
- Can retrieve clip segments from within videos -- perfect for mashups!
- Multilingual subtitling
- Curated collections...

Curated Collections

- Democracy Now!
- US congress (w/ Metavid)
- Prelinger archives
- games / speed runs
- cartoons / animations
- feature films



and more!

night of the living dead



Mashup Demo

<http://www-tracey.archive.org/test/mashup.htm>

```
<head><script src="http://www.archive.org/includes/mashup.js"  
language="javascript"></script></head><body>
```

http://www.archive.org/download/to-SF/toSF_512kb.mp4?t=9/39

Mashup Demo

Technologies from:

- Metavid
- Wikimedia
- xiph.org
- annodex
- h264.code-shop.com

Derivatives

Ensure Preservation -- store original video forever

User Accessibility -- formats popular/usable vs. quality/bandwidth

Over time change "derived" formats by using original

Tools /libraries we use:

- ffmpeg
- lib-oggz
- libtheora
- mp4creator

We add metadata to derivatives:

- author/director
- title
- date/year
- CC license
- /details/ page link

New <video> tag!

example:

```
<video controls="true" autoplay="true"  
  src="http://www.archive.org/download/to-SF/toSF.ogv"/>
```

Trivial video embedding - should revolutionize video!

Firefox 3.5 release!

Re-derived our videos to Ogg Theora

Ogg Theora video

Thought to be most free,
unencumbered video codec

Libraries/tools available from:

- xiph.org (libtheora)
- annodex.net/software/liboggz
- ffmpeg

Derivative Questions

- Do popular sites like youtube drive the choice of formats?
- How can one best avoid rights and technology issues?
- re-deriving? what about prior formats?

Seeking

Jumping into streams:

- oggzchop for .ogv
- mod_h264_streaming + lighttpd for h.264 .mp4

Timecodes, standards for accessing:

- annodex.net/TR/draft-pfeiffer-temporal-fragments-03.html
- archive.org/download/to-SF/toSF_512kb.mp4?t=74.5

ACCESS

Uploading:

- support FTP, HTTP, rsync, S3
- single or bulk
- human or robot/script

We provide:

- web page per "item"
- permalinks to media files
- HTML embed code for off-site playback
- JSON information



DEMOS

Upload Demo

JSON Demo

Comprehensive JSON API

- search
- summary metadata in bulk
- detailed metadata for an item

Use same JSON on our back-end
using "server side javascript"
to create the web page HTML for each item

Wikimedia Demo

Welcome Michael Dale!

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